10/12/01 09

S.: 4/6

#### ACLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that my residence, mailing address and citizenship are as stated below next to my name: that I verily believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter claimed and for which a patent is sought in the application entitled:

Birefringence-free passive optical component which application is: Application No. the attached application filed (Confirmation No (for original application) and amended on (for declaration not accompanying application) that I have reviewed and understand the contents of the specification of the above-identified application, including the claims, as amended by any amendment referred to above; that I acknowledge my duty to disclose information of which I am aware and which is material to the patentability of this application as defined in 37 C.F.R. 1.56, that I hereby claim priority benefits under Title 35, United States Code §119(a)-(d) or §365(b) of any foreign application(s) for patent or inventor's certificate, §119(e) of any United States provisional application(s), or §365(a) of any PCT International application which designated at least one country other than the United States of America, listed below and have also identified below any foreign application for patent or inventor's conficate or of any PCT International application having a filing date before that of the application on which priority is claimed: Priority Claimed Application No **Filing Date** Country Number August 23, X 100 41 174.6 Germany 2000 1 hereby claim the benefit under 35 United States Code §120 of any United States application(s), or §365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in a listed prior United States or PCT International application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge my duty to disclose any information material to the patentability of this application as defined in 37 C.F.R. 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application: Status Filing Application No. Date I hereby appoint John H. Mion, Reg. No. 18,879; Thomas J. Macpeak, Reg. No. 19,292; Robert J. Seas, Jr., Reg. No. 21,092; Darryl Mexic, Reg. No. 23,063; Robert V. Sloan, Reg. No. 22,775; Peter D. Olexy, Reg. No. 24,513; J. Frank Osha, Reg. No. 24,625; Waddell A. Biggart, Reg. No. 24,861; Louis Gubinsky, Reg. No. 24,835; Neil B. Siegel, Reg. No. 25,200; David J. Cushing, Reg. No. 28,703; John R. Inge, Reg. No. 26,916; Joseph J. Ruch, Jr., Reg. No. 26,577; Sheldon I. Landsman, Reg. No. 25,430; Richard C. Turner, Reg. No. 29,710; Howard L. Bernstein, Reg. No. 25,665; Alan J. Kasper, Reg. No. 25,426; Kenneth J. Burchfiel, Reg. No. 31,333; Gordon Kit, Reg. No. 30,764; Susan J. Mack, Reg. No. 30,951; Frank L. Bernstein, Reg. No. 31,484; Mark Boland, Reg. No. 32,197; William H. Mandir, Reg. No. 32,156; Brian W. Hannon, Reg. No. 32,778; Abraham J. Rosner, Reg. No. 33,276; Bruce E. Kramer, Reg. No. 33,725; Paul F. Neils, Reg. No. 33,102; Brett S. Sylvester, Reg. No. 32,765; Robert M. Masters, Reg. No. 35,603, George F. Lehnigk, Reg. No. 36,359, John T. Callahan, Reg. No. 32,607, Steven M. Gruskin, Reg. No. 36,818, Peter A. McKenna, Reg. No. 38,551 and Edward F. Kenehan, Reg. No. 28,962, my attorneys to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith, and request that all correspondence about the application be addressed to SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC, 2100 Pennsylvania Avenue, N.W., Washington, D.C. 20037-3213. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon. KLEKAMP December 10, 2001 Axol Date Middle Initial Last Name First Name Signature Germany <u>Markgröningen</u> Residence State/Country Rieslingweg 8 Mailing Address: 71706 Markgröningen, Germany Citizenship German

+49 711 821 44599 Faxabsender:

ALCATEL IPD

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Date Dec	ember 10.	2001	Second Inventor	Wiltraud		WISCHMANN
Residence	Markgröni City		Signate	First Name	Middle Initial	Last Name
Mailing Addre	•	Pappelweg 66 71706 Markgröningen, Ger	тапу			
Citizenship	German					
Date			Third Inventor	Arnd		KILIAN
Residence	Berlin City	Germany State/Country	Signat	First Name ure	Middle Initial	Last Name
Mailing Addr	985 <u>:</u>	Wilhelmstrasse 48 10117 Berlin, Germany				
Citízenship	German					

Faxabsender: +49 711 821 44599

ALCATEL IPD

10/12/01 09:42 S.: 6

WISCHMANN Second Inventor Wiltraud Date loitinI elbbiM Last Name First Name Markgröningen Germany Signature Residence City State/Country Pappelweg 66 Mailing Address: 71706 Markgröningen, Germany Citizenship German KILIAN Arnd December 10, 2001 Third Inventor Date Middle Initial First Name Last Name Signature Germany Residence Berlin State/Country City Wilhelmstrasse 48 Mailing Address: 10117 Berlin, Germany Citizenship German



FEBRUARY 04, 2002

PTAS

SUGHRUE MION, PLLC
DAVID J. CUSHING
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, D.C. 20037-3213

Under Secretary of Commerce For Intellectual Property and Director of the United States Patent and Trademark Office Washington, DC 20231 www.uspto.gov



\*101915844A\*

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PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 12/11/2001

REEL/FRAME: 012357/0669

NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

KLEKAMP, AXEL

DOC DATE: 12/10/2001

ASSIGNOR:

WISCHMANN, WILTRAUD

DOC DATE: 12/10/2001

ASSIGNOR:

KILIAN, ARND

DOC DATE: 12/10/2001

ASSIGNEE:

ALCATEL

54, RUE LA BOETIE 75008 PARIS, FRANCE

SERIAL NUMBER: 09933731

PATENT NUMBER:

FILING DATE: 08/22/2001

ISSUE DATE:

012357/0669 PAGE 2

LAZENA MARTIN, EXAMINER ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS

12-14-2001

O65476

Form PTO-1505 (modified) (Rev. 03/01) OMB No. 0651-00 (RADEMARY

EET U.S. DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office 101915844 To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof. 2. Name and address of receiving party(ies): 1. Name of conveying party(ies): Axel KLEKAMP ALCATEL 54, rue La Boetie Wiltraud WISCHMANN 75008 Paris, FRANCE Arnd KILIAN Additional name(s) of conveying party(ies) attached? \(\sigma\) Yes \(\sigma\) No 3. Nature of conveyance: ☑ Assignment ☐ Merger ☐ Security Agreement ☐ Change of Name ☐ Other Execution Date: December 10, 2001 Additional name(s) & address(es) attached? 

Yes 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) B. Patent No.(s) 09/933,731 Additional numbers attached? ☐ Yes ☑ No 5. Name and address of party to whom correspondence 6. Total number of applications and patents involved: concerning document should be mailed: \$40.00 7. Total fee (37 CFR 3.41): SUGHRUE MION, PLLC 2100 Pennsylvania Avenue, N.W. ☑ Enclosed. Please charge any underpayment in connection Suite 800 with this Assignment to Deposit Account No. 19-4880. Washington, D.C. 20037-3213 ☐ Authorized to be charged to deposit account 8. Deposit account number: 19-4880 (Attach duplicate copy of this page if paying by deposit account) DO NOT USE THIS SPACE 9. Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. December 11, 2001 Reg. No. 28,703 Date Total number of pages including cover sheet, attachments, and documents: 3 Mail documents to be recorded with required cover sheet information to: Commissioner of Patents & Trademarks Box Assignment Washington, D.C. 20231

01 FC:581

# **Assignment**

Whereas, I/Wc Axel KLEKAMP, Wiltraud WISCHMANN and Arnd KILIAN of Markgröningen, Germany, Markgröningen, Germany and Berlin, Germany hereinafter called assignor(s), have invented certain improvements in Birefringence-free passive optical component

and executed an application for Letters Patent of the United States of America therefor in

Application number 09933731 and Confirmation number 0524, on

Whereas	, ALCATEL
	54 , rue La Boetie
	75008 Paris, France
(assign United States p	nec), desires to acquire the entire right, title, and interest in the application and invention, and to any patents to be obtained therefor;
Now the	herefore, for valuable consideration, receipt whereof is hereby acknowledged,
successors and United States of U.S. Patent and the assignee, it	the above named assignor(s), hereby sell, assign and transfer to the above named assignce, its assigns, the entire right, title and interest in the application and the invention disclosed therein for the of America, including the right to claim priority under 35 U.S.C. §119, and I/we request the Director – d Trademark Office to issue any Letters Patent granted upon the invention set forth in the application t is successors and assigns; and I/we will execute without further consideration all papers deemed
	ne assignee in connection with the United States application when called upon to do so by the assignee
Date: Dec. 10	s/ Wiltraud WISCHMANN / 124 / 12 2
Date: Dec. 10	0, 2001 Axel KLEKAMP  s/  D. 2001 Wiltraud WISCHMANN Lordhauch Wischwan
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Date: Dec. 16  Date: Dec. 16  Date:	0, 2001 Axel KLEKAMP  s/  0. 2001 Wiltraud WISCHMANN Loibroad Lischwoun  s/  Arnd KILIAN  s/

SOLE/JOINT

## **Assignment**

Whereas, I/We Axel KLEKAMP, Wiltraud WISCHMANN and Arnd KILIAN of Markgröningen, Germany, Markgröningen, Germany and Berlin, Germany hereinafter called assignor(s), have invented certain improvements in Birefringence-free passive optical component

and executed an application for Letters Patent of the United States of America therefor in Application number 09933731 and Confirmation number 6.524, on December 10, 2001; and

Whereas,

ALCATEL 54, rue La Boetie 75008 Paris, France

(assignee), desires to acquire the entire right, title, and interest in the application and invention, and to any United States patents to be obtained therefor;

Now therefore, for valuable consideration, receipt whereof is hereby acknowledged,

I/We, the above named assignor(s), hereby sell, assign and transfer to the above named assignee, its successors and assigns, the entire right, title and interest in the application and the invention disclosed therein for the United States of America, including the right to claim priority under 35 U.S.C. §119, and I/we request the Director – U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; and I/we will execute without further consideration all papers deemed necessary by the assignee in connection with the United States application when called upon to do so by the assignee.

Date:	Axel KLEKAMP	
	s/	
Date:	Wiltraud WISCHM	NNA
	s/	1 1 5
Date:	Dec. 10, 2001 Arnd KILIAN	Anni Un
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Date:		-
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(Legalization not required for recording but is prima facie evidence of execution under 35 U.S.C. §261) 8/92



SEPTEMBER 15, 2003

PTAS

WILSON SONSINI GOODRICH & ROSATI U.P. PETER ENG 650 PAGE MILL ROAD, FH 1-2 PALO ALTO, CA 94304-1050 UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS Weshington, D.C. 20231



\* 700043845A\*

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PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 09/11/2003

REEL/FRAME: 013967/0152

NUMBER OF PAGES: 7

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

ALCAEL

DOC DATE: 07/31/2003

ASSIGNEE:

AVANEX CORPORATION 40919 ENCYCLOPEDIA CIRCLE FREMONT, CALIFORNIA 94538

SERIAL NUMBER: 09933731

PATENT NUMBER:

FILING DATE: 08/22/2001

ISSUE DATE:

JEFFREY OLSEN, EXAMINER ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS Sep.11. 2003 4:42PM

09/11/2003 700043845 No.9914 P. 2

FORM PTO-1595 RECORDA	TION FORM COVER SHEET	II O DETINITION OF CALL	
I / 45	ATENTS ONLY	U.S. DEFARTMENT OF COMMERCE  Patent and Trademark Office	
To the Commissioner of Patents and Trade	emarks: Please record the attached original		
1. Name of conveying party(ies):	2. Name and address of recei		
Alcatel 54 rue La Boétie, 75008 Paris, France Additional name(s) of conveying party(ies) attached  Yes No  Nature of conveyance:  Assignment Merger Security Agreement Change of Conveying party(ies)	Name: Avanex Corpora Street Address: 40919 ]  d7 City/State/Zip: Fremont Additional name(s) & address(s	tion Encyclopedia Circle i, California 94538	
Execution Date: <u>July 31, 2003</u> 4. Application number(s) or patent number(s): 1			
If this document is being filed together with a new s	application, the execution date of the applica	tion is:	
A. Patent Application No.(6): 09/933,731	B. Patent No.(s):		
Addition	nal numbers attached?  Yes  No		
<ol> <li>Name and address of party to whom correspond concerning document should be mailed:</li> <li>Name: U.P. Peter Eng Internal Address: FH 1-2 Wilson Sonsini Goodrich &amp; Rosati</li> </ol>	6. Total number of applications involved: [1]  7. Total fee (37 CFR 3.41)	s and paterns	
650 Page Mill Road	☐ Enclosed ☐ Authorized to be charged	i to deposit account	
Palo Alto, CA-94304-1050	8. Deposit account number: _2 (Attorney Docket No.: 227.20	3-2415	
DOI	NOT USE THIS SPACE		
<ol> <li>Statement and signature.</li> <li>To the best of my knowledge and belief, the fore the original document.</li> </ol>	egoing information is true and correct and a	ny attached copy is a true copy of	
U.P. Peter Bng, Rog. No. 39,666	Um Pay Caturton	9/11/2003	
Name of Person Signing	Signature	Date	
	Total number of pages including cover shee	et, attachments, and document: [7]	

#### PATENT ASSIGNMENT

This Patent Assignment ("Assignment") is made as of July 31, 2003 by Alcatel, a French Company organized and existing under the laws of France, having its registered office 54 rue La Boétie, 75008 Paris, France ("Assignor"), to Avanex Corporation, a Delaware corporation having a place of business at 40919 Encyclopedia Circle, Fremont, California 94538, United States of America ("Assignee").

#### RECITALS

- A. Assignor, Assignee and Corning Incorporated have entered into a Share Acquisition and Asset Purchase Agreement dated as of May 12, 2003 (the "Purchase Agreement").
- B. Assignor owns the patent(s) issued by the United States Patent and Trademark Office and certain foreign patent and trademark offices, as well as patent applications filed with the United States Patent and Trademark Office and certain foreign patent and trademark offices, as set forth on Schedule A hereto (the "Patents").
- Pursuant to the Purchase Agreement, Assignor desires to assign to Assignee all of Assignor's right, title and interest in and to the Patents.

#### **AGREEMENT**

NOW, THEREFORE, in consideration of the foregoing premises, the mutual covenants and agreements contained in the Purchase Agreement and the covenants and agreements in this Assignment and to induce Assignee to consummate the transactions contemplated by the Purchase Agreement, Assignor agrees as follows:

Assigner does hereby irrevocably sell, transfer, convey, assign and deliver to Assignee all of Assignor's right, title and interest in and to the Patents (and regarding Patents that are patent applications, any patents that may issue therefrom), including any foreign counterparts, patents or patent applications to which the Patents claim priority, divisionals, continuations in whole or in part, reexaminations, reissues or extensions thereof, and the right to claim priority to any of the preceding, the same to be held by Assignee for Assignee's own use and enjoyment, and for the use and enjoyment of Assignee's successors, assigns and other legal representatives, as fully and entirely as the same would have been held and enjoyed by Assignor if this Assignment and sale had not been made; together with all claims for damages by reason of past infringements of the Patents and the right to sue for and collect such damages, as permitted under the applicable laws for any jurisdiction or country in which such claims may be asserted (provided, however, that the foregoing does not require Assignor to pay to Assignee any revenues or damages previously recovered or to be recovered pursuant to contracts previously concluded by Assignor, nor does it amend any other written agreements between Assignor and Assignee with respect thereto), for the use and benefit of Assignee and its successors, assigns and other legal representatives.

2. Assignor hereby authorizes and requests the Commissioner of Patents and Trademarks of the United States, and any officer of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of intellectual property protection or applications as aforesaid, to issue the same to Assignee and its successors, assigns and other legal representatives in accordance with the terms of this instrument.

IN WITNESS WHEREOF, Assignor has executed this Assignment.

**ASSIGNOR** 

Ву: 🙎

Signature

Printed Name: Ulrich Knecht

Title: Director Intellectual Property

# Schedule A

### Certificate of Signature

The signature executed before me above by

Mr. Ulrich K n e c h t , born March 02 <sup>th</sup>,1957, Lorenzstr. 10, 70435 Stuttgart,

-identified by ID-Card of the Federal Republic
 of Germany-

is herewith duly certified.

Stuttgart, July 25th, 2003

UR-Nr. 406 / 2003

Hans Ulich Kurz Notary Public at Stuttgart

# ALCATEL patents to be assigned

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